CST LEVEL 1 LAND SURVEYOR CERTIFICATION PRACTICE (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://cstlevel1landsurveyor.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

SAMPLE

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

SAMPLE

Questions

SAMPLE

1. In metes and bounds surveying, what do 'metes' refer to?

A. Physical features of the land

B. Measures of boundary limits

C. Legal descriptions of land

D. Elevation points on a map

2. What is the ideal rhythm for performing CPR?

A. 60-80 BPM

B. 80-100 BPM

C. 100-120 BPM

D. 120-140 BPM

3. Which feature is characteristic of a dumpy level?

A. It has an internal compensator

B. It uses a rotating laser for measurement

C. It possesses fixed crosshairs

D. It automatically levels itself

4. What is represented by the abbreviation 'FS' in regular leveling?

A. Front Sight

B. Field Survey

C. Foresight

D. Final Survey

5. How many meters are in one foot?

A. 0.3048 m

B. 0.254 m

C. 0.368 m

D. 0.382 m

6. What is the purpose of the Least Squares line regression in surveying?

A. To eliminate systematic errors

B. To adjust random errors and reconcile measurement differences

C. To increase the number of measurements taken

D. To solely analyze direct measurements

SAMPLE

7. What is the function of stadia marks on a level?

A. To increase accuracy in measurements

B. To allow multiple measurements to be taken and averaged

C. To help determine instrument error

D. To measure horizontal angles

8. Why is third-degree burn classified as the worst burn?

A. It involves only the outer layer of skin.

B. It affects multiple layers of skin and may damage underlying tissues.

C. It heals quickly without scarring.

D. It requires only home treatment.

9. What does a Laser Level commonly assist with on construction sites?

A. Setting accurate boundaries

B. Ensuring horizontal alignment through a laser beam

C. Tracking changes in material density

D. Adjusting land elevation

10. Which is NOT a type of horizontal angle?

A. Interior angle

B. Deflection angle

C. Zenith angle

D. Exterior angle

SAMPLE

Answers

SAMPLE

1. B
2. C
3. C
4. C
5. A
6. B
7. B
8. B
9. B
10. C

SAMPLE

Explanations

SAMPLE

1. In metes and bounds surveying, what do 'metes' refer to?

A. Physical features of the land

B. Measures of boundary limits

C. Legal descriptions of land

D. Elevation points on a map

In metes and bounds surveying, the term 'metes' specifically refers to the measures of boundary limits. This involves the use of precise measurements and directions to define the boundaries of a parcel of land. Typically, 'metes' are expressed in terms of distance and direction, which could include feet, meters, angles, or bearings. This method is commonly contrasted with other legal descriptions, like lot and block surveys. While physical features of the land might play a role in defining boundaries, they do not constitute the term 'metes.' Legal descriptions, which provide a formal way of describing land for deeds and titles, often incorporate both metes and bounds, but 'metes' itself focuses on the specific measurement aspect. Elevation points, while important in surveying, relate more to the topographical detail rather than the boundary definition context that 'metes' addresses. Thus, understanding that 'metes' are strictly concerned with measurement allows for accurate interpretations in land surveying.

2. What is the ideal rhythm for performing CPR?

A. 60-80 BPM

B. 80-100 BPM

C. 100-120 BPM

D. 120-140 BPM

The ideal rhythm for performing CPR is between 100 and 120 beats per minute (BPM). This range is supported by guidelines from health organizations such as the American Heart Association. The rationale behind this BPM range is that it strikes a balance between providing sufficient blood flow to the brain and vital organs while ensuring the compressions are effective. Performing compressions at this rate allows for adequate time for the chest to recoil between compressions, which helps maintain blood flow. If compressions are too slow, it may not provide sufficient circulation; if they are too fast, it can lead to ineffective compressions, reducing the overall effectiveness of CPR.

3. Which feature is characteristic of a dumpy level?

A. It has an internal compensator

B. It uses a rotating laser for measurement

C. It possesses fixed crosshairs

D. It automatically levels itself

The characteristic feature of a dumpy level is that it possesses fixed crosshairs. This tool is designed primarily for horizontal leveling and establishing straight lines of sight for surveying purposes. Unlike more advanced instruments, a dumpy level does not include any internal compensator or self-leveling capabilities. The fixed crosshairs allow surveyors to aim accurately at a survey stake or reference point, ensuring that the line of sight remains constant and precise during measurements. While some other leveling instruments may feature automatic leveling or rotating lasers to facilitate measurements, a dumpy level relies on manual adjustments and the stability of its fixed crosshairs to achieve its purpose. This simplicity makes the dumpy level a reliable choice for many traditional surveying tasks.

SAMPLE

4. What is represented by the abbreviation 'FS' in regular leveling?

A. Front Sight

B. Field Survey

C. Foresight

D. Final Survey

In the context of regular leveling, the abbreviation 'FS' stands for "Foresight." Foresight refers to the reading taken on a leveling staff placed at the point whose elevation is to be determined. When performing a leveling operation, the surveyor records a foresight reading after observing the backsight (BS) on a known benchmark. The difference between the backsight and foresight readings allows the surveyor to calculate the elevation of the new point relative to the benchmark. Understanding the term 'Foresight' is essential in leveling as it directly relates to determining elevations, which is a fundamental task in land surveying. Each measurement plays a critical role in ensuring accurate height determinations and overall reliability in survey data. The other terms may refer to related but different aspects of surveying. "Front Sight" is not a standard abbreviation in leveling; instead, the commonly accepted terminology is "backsight" and "foresight." "Field Survey" refers to the entire surveying process conducted in the field, while "Final Survey" typically describes the comprehensive survey completed at the end of a project. In surveying practice, clarity and correct terminology are crucial for accurate communication and understanding, making the concept of 'Foresight' the correct choice in this question

5. How many meters are in one foot?

A. 0.3048 m

B. 0.254 m

C. 0.368 m

D. 0.382 m

One foot is equal to 0.3048 meters, which is a standard conversion recognized globally in various fields, including surveying, construction, and engineering. This conversion factor comes from the metric system and is used to facilitate precise measurements, especially for international projects where both metric and imperial units may be utilized. Understanding this conversion is essential for land surveyors, as accurate measurements are critical for establishing boundaries, calculating areas, and ensuring compliance with legal standards. The foot is a commonly used unit in the United States, and being able to convert it to meters enhances communication and collaboration with international teams that predominantly use the metric system. The other options represent incorrect conversion values, which can lead to inaccuracies in measurements if used in surveying or related calculations. It is important for professionals to have a firm grasp of these conversions to avoid potential errors in their work.

SAMPLE

6. What is the purpose of the Least Squares line regression in surveying?

A. To eliminate systematic errors

B. To adjust random errors and reconcile measurement differences

C. To increase the number of measurements taken

D. To solely analyze direct measurements

The purpose of the Least Squares line regression in surveying is to adjust random errors and reconcile measurement differences. This statistical method is used to fit a mathematical model to observed data, minimizing the sum of the squares of the differences (the residuals) between observed and predicted values. By doing so, it effectively optimizes the placement of the line of best fit through multiple data points. In surveying, measurements can often be affected by random errors due to various factors such as instrument precision, environmental conditions, or human factors. The Least Squares adjustment helps in smoothing out these discrepancies, leading to more reliable and accurate final coordinates or measurements. Furthermore, this process improves the overall quality of the survey by allowing surveyors to account for inconsistencies in their data, thus ensuring that measurements are reconciled and representative of the true position or value being surveyed.

7. What is the function of stadia marks on a level?

A. To increase accuracy in measurements

B. To allow multiple measurements to be taken and averaged

C. To help determine instrument error

D. To measure horizontal angles

Stadia marks on a level are specifically designed to facilitate repeated measurements, which can then be averaged for increased reliability. When using a leveling instrument equipped with stadia marks, surveyors can take multiple readings on various points, allowing them to calculate an average distance to improve accuracy. This technique enhances the precision of the measurement process by minimizing the impact of random errors that could affect a single reading. These marks do not directly increase accuracy per se but provide a method through which surveyors can ascertain more reliable measurements through averaging. Unlike other functions such as determining instrument error or measuring horizontal angles, which are served through different means and techniques in surveying, the primary utility of stadia marks is indeed tied to taking multiple measurements efficiently and calculating their average.

8. Why is third-degree burn classified as the worst burn?

A. It involves only the outer layer of skin.

B. It affects multiple layers of skin and may damage underlying tissues.

C. It heals quickly without scarring.

D. It requires only home treatment.

Third-degree burns are classified as the worst type because they penetrate through the epidermis (the outer layer of skin) and the dermis (the inner layer), affecting multiple layers and potentially damaging underlying tissues such as fat, muscle, and even bone. This extensive damage not only destroys the skin but can also lead to serious complications such as infections, fluid loss, and significant scarring. The severity of third-degree burns often necessitates specialized medical treatment, and healing can be a lengthy process that may require skin grafts to promote recovery and reduce scarring. Moreover, the loss of sensation in the burned area, due to the destruction of nerve endings, can make these injuries particularly dangerous, as individuals may not realize the extent of their injuries or may fail to attend to necessary treatments. In contrast, burns described in other options either affect only superficial skin layers, heal quickly, or can be managed with basic home care. Such definitions do not apply to third-degree burns, which require professional medical intervention due to their severity.

SAMPLE

9. What does a Laser Level commonly assist with on construction sites?

A. Setting accurate boundaries

B. Ensuring horizontal alignment through a laser beam

C. Tracking changes in material density

D. Adjusting land elevation

A Laser Level plays a crucial role on construction sites by ensuring horizontal alignment through the projection of a laser beam. This device helps achieve precise leveling across long distances, which is essential for tasks like setting foundations, aligning structures, and ensuring that various components of construction projects are level relative to one another. By using a laser beam, surveyors and construction workers can reference a clear and accurate benchmark, making it easier to achieve the desired elevations and alignments necessary for the integrity and quality of the construction work. In contrast, while setting accurate boundaries is important on a construction site, it typically involves different tools and techniques such as stakes and compasses. Tracking changes in material density does not fall under the primary functions of a laser level, which is focused on alignment rather than material properties. Adjusting land elevation involves larger earth-moving equipment and surveying techniques to alter the physical properties of the land, rather than the precise alignment capabilities provided by a laser level.

10. Which is NOT a type of horizontal angle?

A. Interior angle

B. Deflection angle

C. Zenith angle

D. Exterior angle

The correct answer is the zenith angle, as it is not classified as a horizontal angle. A zenith angle is measured from the vertical, specifically defined as the angle formed between a point directly overhead (the zenith) and a point on the horizon. It deals with vertical measurements rather than horizontal, which fundamentally distinguishes it from other types of angles used in surveying. In contrast, interior angles, deflection angles, and exterior angles all pertain to horizontal measurements. Interior angles are the angles formed between two line segments that converge at a point inside a polygon, often seen in the context of triangulation. Deflection angles are the angles measured in a horizontal plane that indicate how much a survey line bends from a previous line, which is crucial for determining changes in direction. Exterior angles are formed outside a polygon, at a vertex, and are defined with respect to the extension of one of the sides. Each of these angles is critical for understanding spatial relationships and measurements in surveying.

SAMPLE

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://cstlevel1landsurveyor.examzify.com

We wish you the very best on your exam journey. You've got this!

SAMPLE